

Mr. and Mrs. Case Swenson
62 Ellenwood Avenue
Los Gatos, CA 95030

Subject: New Residence
62 Ellenwood Avenue
Los Gatos, CA
GEOTECHNICAL UPDATE

References: 1) Architectural Plans
By *Arcanum Architecture, Inc.*
Dated 20 December 2019
2) Geotechnical Investigation
By *Pollak Engineering, Inc.*
Dated 3 March 2017

Dear Mr. and Mrs., Swenson:

In accordance with your authorization, **Pollak Engineering, Inc.** has reviewed the referenced Architectural Plans and Geotechnical Investigation pertaining to the subject site and on 30 January 2020 has performed a site visit to determine if recommendations contained in the referenced report are still applicable to current site conditions. Based on our review and site visit, it is our opinion that the recommendations contained in the referenced Geotechnical Investigation are still applicable with the following notations:

- 1) Current project plans include a new swimming pool, pool house, and a partial basement.
- 2) The partial basement may be supported on a structural mat slab designed and constructed in accordance with recommendations contained in the referenced Geotechnical Investigation.
- 3) The pool house, garage and those parts of the new residence not supported by the basement retaining walls must be founded on the competent native soil underlying any topsoil or fill soil.
- 4) It is anticipated that the pool house, garage and those parts of the new residence not supported by the basement retaining walls will be supported on drilled friction piers. Drilled friction piers should be a minimum of 16" in diameter and should extend a minimum of 8 feet into competent native material underlying any fill soil or topsoil. Pier depths of approximately 10 to 12 feet are anticipated, however actual pier depths will be determined by the project engineer during pier drilling operations.
- 5) Drilled friction piers should be designed based on a skin friction value of 650 psf. acting between the soil and the pier for that portion of the pier that extends into competent native material (8 feet). The skin friction value may be increased by one third due to temporary loads which include wind or seismic.



Geotechnical
Engineering

Engineering
Geology

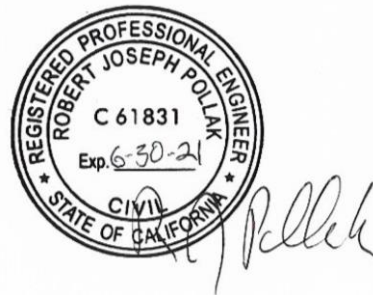
61 East Main Street, Suite D
Los Gatos, CA 95030

Phone: 408-499-5589

- 6) Drilled piers should not be spaced closer than 3 pier diameters apart as measured from center to center. To resist lateral forces, passive earth pressures can be assumed to acting on a projection of two pier diameters for that portion of the pier that extends deeper than one foot. An allowable passive resistance of 350 pcf. per foot can be used for that portion of the pier that extends into competent native material.
- 7) The proposed swimming pool must be entirely founded on the competent native material underlying any topsoil or fill soil.
- 8) Pool walls should be designed to withstand lateral forces equivalent to those exerted by a fluid medium with a density of 45 pcf.
- 9) It is recommended that an 8inch gravel blanket be placed beneath the pool bottom as a cushion. The gravel blanket should consist of clean drain rock or granular crushed rock.
- 10) *Pollak Engineering, Inc.* must observe and approve all grading, foundation, and drainage operations.

Should you have any questions relating to the contents of this letter or should you require additional information, please do not hesitate to contact our office at your convenience.

Very truly yours,
Pollak Engineering, Inc.



Robert Pollak, P.E.
Principal Engineer